



D-NE520

Operating Instructions

Atrac CD Walkman
Portable
CD Player 



Atrac3plus 



Printed on 100 % recycled paper using
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vegetable oil based ink.

<http://www.sony.net/>

Sony Corporation Printed in Malaysia



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WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

To prevent fire, do not cover the ventilation of the apparatus with newspapers, table-cloths, curtains, etc. And don't place lighted candles on the apparatus.

To prevent fire or shock hazard, do not place objects filled with liquids, such as vases, on the apparatus.

CAUTION

The use of optical instruments with this product will increase eye hazard.

Certain countries may regulate disposal of the battery used to power this product. Please consult with your local authority.

CAUTION

- INVISIBLE LASER RADIATION WHEN OPEN
- DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS
- CLASS 1M INVISIBLE LASER RADIATION WHEN OPEN
- DO NOT VIEW DIRECTLY WITH OPTICAL INSTRUMENTS

The validity of the CE marking is restricted to only those countries where it is legally enforced, mainly in the countries EEA (European Economic Area).



Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste.

Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment.

By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local Civic Office, your household waste disposal service or the shop where you purchased the product.

Applicable accessories:
Earphones, Remote control (Remote)

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This manual describes how to use the CD player. For the supplied software SonicStage, please see "Installation/Operating Guide."

Notice for users

On the supplied software

Depending on the type of the text and characters, the text shown on SonicStage may not be displayed properly on the device. This is due to:

- The limitations of the connected player.
 - The player is not functioning normally.

ATRAC3plus is a trademark of Sony Corporation.

“WALKMAN” is a registered trademark of Sony Corporation to represent Headphone Stereo products.  WALKMAN is a trademark of Sony Corporation.

Create Your Own ATRAC CDs

In addition to the usual audio CDs, you can play an original CD, called "ATRAC CD," that you create with the supplied software, SonicStage. Using SonicStage, about 30 audio CDs* can be recorded on one CD-R or CD-RW.

The following is a quick overview of how you listen to music on your ATRAC CD.

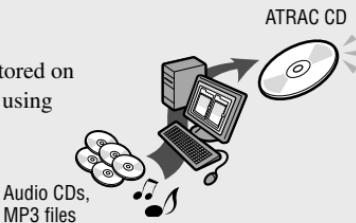
Install SonicStage on your computer.

SonicStage is software that takes music downloaded from audio CDs on your computer and creates original CDs. It can be installed from the supplied CD-ROM.



Create an ATRAC CD.

After selecting your favorite songs from music stored on your computer, record them on a CD-R/CD-RW using SonicStage.



Listen to them with this CD player.

You can take lots of songs wherever you go on your original CD.



Please see the supplied "Installation/Operating Guide" for how to install SonicStage and how to create ATRAC CDs.

* When the total playing time of one CD (album) is estimated at 60 minutes and you are recording on a 700 MB CD-R/CD-RW at 48 kbps in ATRAC3plus format.

Which discs can you play on this CD player?



Audio CDs:

CD-DA format CDs

CD-DA (Compact Disc Digital Audio) is a recording standard used for Audio CDs.



ATRAC CDs:

CD-R/CD-RW on which audio data compressed in the ATRAC3plus format has been recorded by using SonicStage*

ATRAC3plus (Adaptive Transform Acoustic Coding3plus) is audio compression technology that satisfies the demand for high sound quality and high compression rates. ATRAC3plus can compress audio files to about 1/20 of their original size at 64 kbps.

Bit rates and sampling frequencies this CD player can play are:

	Bit rates	Sampling frequencies
ATRAC3	66/105/132 kbps	44.1 kHz
ATRAC3plus	48/64/256 kbps	44.1 kHz

Up to 62 characters can be displayed on this CD player.



MP3 CDs:

CD-R/CD-RW on which audio data compressed in the MP3 format has been recorded by using a software other than SonicStage*

Bit rates and sampling frequencies this CD player can play are shown below. Variable Bit Rate (VBR) files can also be played.

	Bit rates	Sampling frequencies
MPEG-1 Layer3	32 - 320 kbps	32/44.1/48 kHz
MPEG-2 Layer3	8 - 160 kbps	16/22.05/23 kHz
MPEG-2.5 Layer3	8 - 160 kbps	8/11.025/12 kHz

This CD player conforms to Version 1.0/1.1/2.2/2.3/2.4 of the ID3 tag format. ID3 tag is a format for adding certain information (track name, album name, artist name, etc.) to MP3 files. Up to 64 characters of ID3 tag information can be displayed on this CD player.



CD-Extra and Mix-Mode CDs:

CD-R/CD-RW on which CD-DA format data and CD-ROM format data are recorded together.*

If you cannot play your CD, change the "CD-EXTRA" setting in the OPTION menu (☞ page 27). Then you may play your CD.

An ATRAC CD on which audio data compressed in the MP3 format has been recorded using software other than SonicStage can also be played.

With SonicStage, you cannot create a CD on which mixed format audio data is recorded.

* Only ISO 9660 Level 1/2 and Joliet extension format discs can be played.

Music discs encoded with copyright protection technologies

This product is designed to play back discs that conform to the Compact Disc (CD) standard. Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

Difference in File structures of ATRAC CDs and MP3 CDs

ATRAC CDs and MP3 CDs consist of "files" and "groups". A "file" is equivalent to a "track" of an audio CD. A "group" is a bundle of files and is equivalent to an "album".

For MP3 CDs, this CD player recognizes an MP3 folder as a "group" so that ATRAC CDs and MP3 CDs can be operated in the same way.

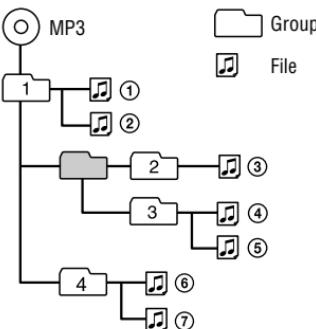
The usable number of groups and files

- Maximum number of groups: 256
- Maximum number of files: 999

Playing order of ATRAC CDs and MP3 CDs

For ATRAC CDs, files are played in the order selected in SonicStage.

For MP3 CDs, the playing order may differ depending on the method used to record MP3 files on the disc. A "play list" which contains an MP3 file playing order can also be played. In the following example, files are played in order of ① to ⑦.



(Maximum directory levels: 8)

Notes

- If ATRAC3plus files and MP3 files are recorded on the same CD, this CD player plays the ATRAC3plus files first.
- The playback capability of this CD player may vary depending on the quality of the disc and the condition of the recording device.
- Acceptable characters are A to Z, a to z, 0 to 9, and _ (underscore).
- On a disc that has ATRAC3plus/MP3 files, do not save files in other formats and do not make unnecessary folders.

About ATRAC CDs

- CD-Rs/CD-RWs recorded in the ATRAC3plus format cannot be played on your computer.

About MP3 CDs

- Be sure to add the file extension "mp3" to the file name. However, if you add the extension "mp3" to a file other than an MP3 file, the player will not be able to recognize the file properly.
- To compress a source in an MP3 file, we recommend setting the compression parameters to "44.1 kHz", "128 kbps", and "Constant Bit Rate".
- To record up to the maximum capacity, set the writing software to "halting of writing".
- To record up to the maximum capacity at one time on media that has nothing recorded on it, set the writing software to "Disc at Once".

Precautions

On safety

- Should any solid objects or liquid fall into the CD player, unplug it and have it checked by qualified personnel before operating it any further.
- Do not put any foreign objects in the DC IN 3V (external power input) jack.

On the CD player

- Keep the lens on the CD player clean and do not touch it. If you do so, the lens may be damaged and the CD player will not operate properly.
- Do not put any heavy object on top of the CD player. The CD player and the CD may be damaged.
- Do not leave the CD player in a location near heat sources, or in a place subject to direct sunlight, excessive dust or sand, moisture, rain, mechanical shock, unleveled surface, or in a car with its windows closed.
- If the CD player causes interference to the radio or television reception, turn off the CD player or move it away from the radio or television.
- Discs with non-standard shapes (e.g., heart, square, star) cannot be played on this CD player. Attempting to do so may damage the CD player. Do not use such discs.

On handling CDs

- To keep the CD clean, handle it by its edge. Do not touch the surface.
- Do not stick paper or tape onto the CD.
- Do not expose the CD to direct sunlight or heat sources such as hot air ducts. Do not leave the CD in a car parked under direct sunlight.

On earphones/headphones

Road safety

Do not use earphones/headphones while driving, cycling, or operating any motorized vehicle. It may create a traffic hazard and is illegal in some areas. It can also be potentially dangerous to play your headsets at high volume while walking, especially at pedestrian crossings. You should exercise extreme caution or discontinue use in potentially hazardous situations.

Preventing hearing damage

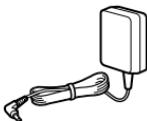
Avoid using earphones/headphones at high volume. Hearing experts advise against continuous, loud and extended play. If you experience a ringing in your ears, reduce volume or discontinue use.

Consideration for others

Keep the volume at a moderate level. This will allow you to hear outside sounds and to be considerate to the people around you.

Checking the Supplied Accessories

- AC power adaptor
- Earphones



- Rechargeable battery
- Battery carrying case



- Remote control (Remote)

(For this CD player only)



- CD-ROM (SonicStage)

Do not play this CD-ROM on an audio CD player including this player.



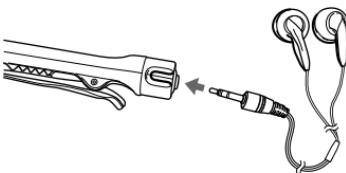
- Operating instructions (This book)
- Installation/Operating Guide

Note

Use only the supplied remote. You cannot operate this player with any other remote.

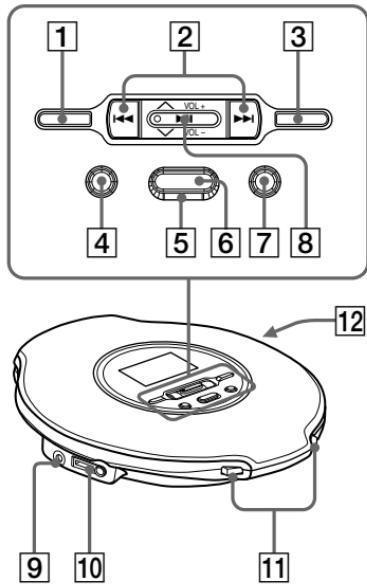
To connect your earphones/headphones to the remote

Connect the plug of your earphones/headphones to the remote securely.

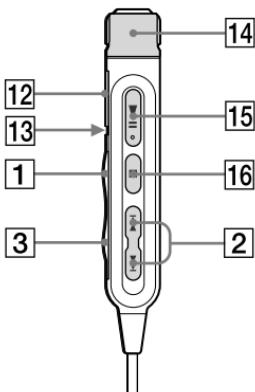


Guide to Parts and Controls

CD player



Remote

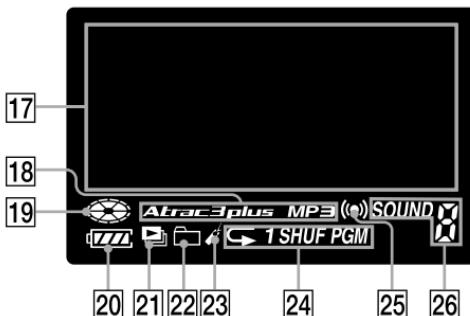


- 1** □ (group) – button (☞ page 15-17, 22)
- 2** ▶◀/▶▶ buttons (☞ page 15, 17, 23)
- 3** □ (group) + button (☞ page 15, 16, 22)
- 4** DSPL (Display)/MENU button
(☞ page 18, 19, 21, 22, 25)
- 5** OPERATION lamp (☞ page 11-14, 16)
- 6** SEARCH button (☞ page 16, 17)
- 7** ■ (stop)/CHARGE button (☞ page 11, 15, 17, 22-24, 26)
- 8** Jog lever
VOL (Volume) +/- (☞ page 14)
A/V (☞ page 16, 17, 19, 21-23, 25)
▶▶ (play/pause) (☞ page 14-17, 19, 21-23, 25)
- 9** DC IN 3V (external power input) jack
(☞ page 11, 13)
- 10** ▲ (headphones)/LINE OUT jack
(☞ page 14, 28)
- 11** OPEN switch (☞ page 11, 14)
- 12** HOLD switch (on the back of the CD player) (☞ page 16)
- 13** Clip
- 14** VOL (Volume) +/- control (☞ page 14)
- 15** ▶▶* (play/pause) button (☞ page 14-15)
- 16** ■ (stop) button (☞ page 15)

* This button has a tactile dot.

Continued ▶

CD player display



- 17** Character information display (☞ page 16-19, 22, 23, 25)
- 18** Atrac3plus/MP3 indicator (☞ page 5)
- 19** Disc indicator (☞ page 14, 23)
- 20** Battery indicator (☞ page 11, 12, 23)
- 21** Play list indicator
- 22** Group indicator
- 23** Bookmark indicator (☞ page 21)
- 24** Play mode indicator (☞ page 20)
- 25** Timer indicator (☞ page 26)
- 26** Sound indicator (☞ page 23)

Preparing a Power Source

Use only the following batteries for your player.

Rechargeable battery

Charge the rechargeable battery before using it for the first time or when it is depleted. To maintain the original battery capacity longer, charge the battery only when it is completely depleted ("Low Battery" appears on the display).

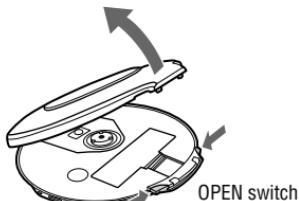
- NH-7WMAA

Dry Battery

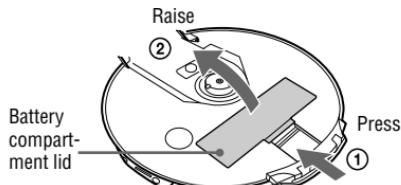
Be sure to remove the AC power adaptor when using the dry battery. Replace the battery with new one when the battery is depleted.

- LR6 (size AA) alkaline battery (not supplied)

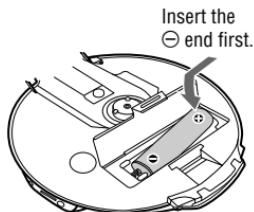
1 Squeeze the OPEN switch from both sides to open the lid of your player.



2 Open the battery compartment lid inside the player.



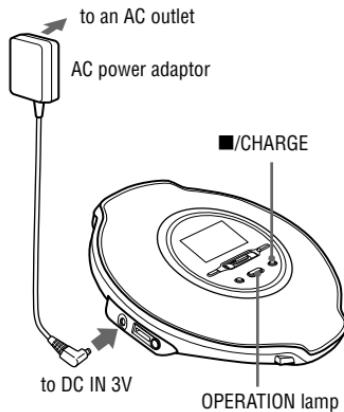
3 Insert the battery by matching the \oplus to the diagram in the battery compartment and close the lid until it clicks into place.



Charging the rechargeable battery

1 Connect the AC power adaptor to the DC IN 3V jack of your player and an AC outlet. Press ■/CHARGE to start charging.

The player charges the battery. "Charging" flashes and the OPERATION lamp lights up on the player, and the indicator sections of  (battery) light up on the display in succession as charging progresses.



When the battery is completely charged, the OPERATION lamp goes off and "Charging" disappears.

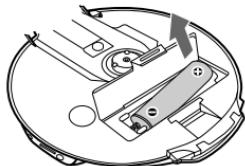
Continued 

Notes

- Do not charge any rechargeable battery other than an NH-7WMAA (supplied) using this AC power adaptor.
- If you press **►II** on the jog lever during charging, charging stops and playback of the CD starts.
- If you connect the AC power adaptor to player during playback, play stops and charging starts.
- During charging, the player and the rechargeable battery become hot. This poses no danger.
- Connect the AC power adaptor securely. Make sure that the OPERATION lamp on the player lights up. Unsecure connection interrupts charging or play.
- Take out the rechargeable battery when the player is not to be used for a long time.

To remove the battery

Remove the battery as illustrated below.



Note on the useful life of the rechargeable battery and when to replace it

If the battery is new or has not been used for a long time, it may not charge completely. In that case, charge it until the OPERATION lamp goes off and then use the player until the battery is completely depleted ("Low Battery" appears on the display). Repeat this procedure several times.

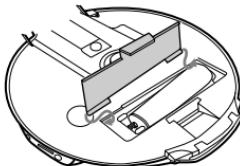
When the battery life is still shorter by about half of a normal charge after trying this procedure, replace the battery with a new rechargeable battery.

Note on carrying the rechargeable battery

Use the supplied battery carrying case to protect against unexpected heat. If the rechargeable battery comes into contact with the metallic objects, heat or fire may occur due to a short circuit.

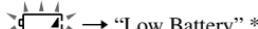
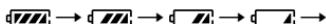
To attach the battery compartment lid

If the battery compartment lid is detached by an accidental drop, excessive force, etc., attach it as illustrated below.



Checking the remaining power of the battery

The remaining power of the battery is indicated in the display as shown below. As the black indicator section decreases, the remaining power is depleted further.



* Beep sounds.

When the battery is depleted, charge the rechargeable battery or replace the dry battery with a new one.

Notes

- The display shows the approximate battery power remaining. For example, one section does not always indicate one-fourth of the battery power.
- Depending on the operating conditions, the display may increase or decrease relative to the actual power remaining.

Battery life ¹⁾

When using one NH-7WMAA rechargeable battery (charged for about 5 hours ²⁾)

G-PROTECTION	"1"	"2"
Audio CD	10	9
ATRAC CD ³⁾	17	16
MP3 CD ⁴⁾	12	11

When using the Sony alkaline battery LR6 (SG) (produced in Japan)

G-PROTECTION		
	“1”	“2”
Audio CD	22	20
ATRAC CD ³⁾	41	40
MP3 CD ⁴⁾	26	25

1)Measured value using the JEITA standard (Japan Electronics and Information Technology Industries Association)

Playing time shown is approximate hours, when you use the player on a flat and stable surface and “POWER SAVE” is set to “2” (☞ page 27). This value varies depending on how the player is used.

2)Charging time varies depending on how the rechargeable battery is used.

3)Recorded at 48 kbps

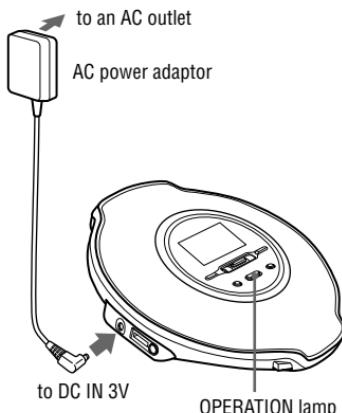
4)Recorded at 128 kbps

Notes on rechargeable batteries and dry batteries

- Do not charge dry batteries.
- Do not throw the batteries into a fire.
- Do not carry batteries in a pocket, etc. with coins or other metallic objects. The battery can generate heat if its positive and negative terminals are accidentally allowed to come into contact with a metallic object.
- When the batteries are not to be used for a long time, remove them.
- If battery leakage occurs, wipe off any deposit left in the battery compartment, and install new batteries. If the deposit adheres to your skin, wash it off thoroughly.

When using the AC power adaptor

You can use the player powered by the AC power adaptor without batteries.

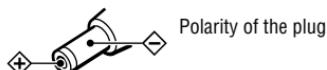


1 Connect the AC power adaptor to the DC IN 3V jack of your CD player and an AC outlet.

Make sure that the OPERATION lamp flashes, then lights up.

Notes on the AC power adaptor

- Disconnect all power sources when the player is not to be used for a long time.
- Use only the AC power adaptor supplied. If your player is not supplied with the one, use an AC-E30HG AC power adaptor (not available in Australia). If you use any other AC power adaptor, malfunction may occur.

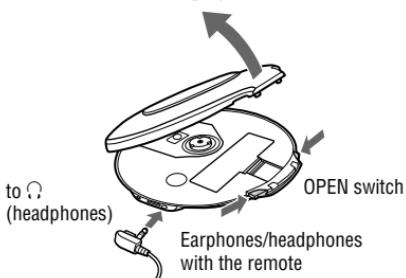


- Do not touch the AC power adaptor with wet hands.
- Connect the AC power adaptor to an easily accessible AC outlet. Should you notice an abnormality in the AC power adaptor, disconnect it from the AC outlet immediately.

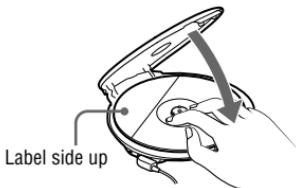
Playing a CD

1 Squeeze the OPEN switch from both sides to open the player lid.

Connect the earphones/headphones with the remote to the player beforehand.



2 Place the CD on the tray and close the lid.



The OPERATION lamp lights up repetitively in red, green and orange, in turn.

3 Press ►II on the remote.

DISC (disc) moves, and the player starts playback.

Color of the OPERATION lamp changes according to the format type of the music source (page 5) being played. Red: CD-DA format, Green: ATRAC3plus format and Orange: MP3 format.

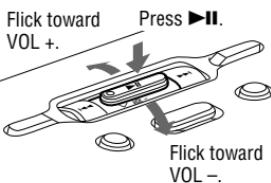


4 Adjust the volume by turning the VOL +/- control on the remote.



On the CD player

After placing the CD on the tray in step 2, press ►II on the jog lever and adjust the volume by flicking the jog lever toward VOL + or -.



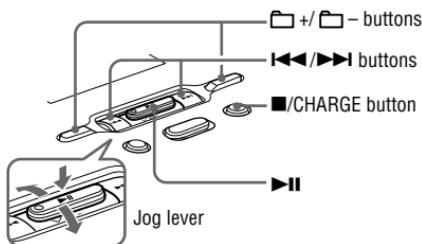
To remove the CD

Remove the CD while pressing the pivot in the center of the tray.

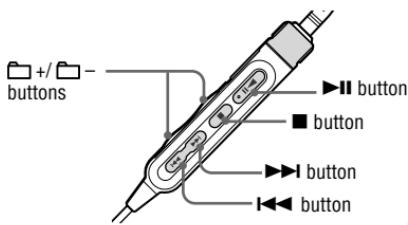


Basic playback operations (Play, stop, search)

CD player



Remote



To	Operation on the remote (Operation on the player is in parentheses)	
Play	Play from the first track	From stop, press and hold <u>/</u> until playback starts. (From stop, press and hold <u>/</u> on the jog lever until playback starts).
Stop	Pause/Resume play after pausing	Press <u>/</u>. (Press <u>/</u> on the jog lever).
	Stop playback	Press ■ (stop). (Press ■/CHARGE).
Search	Find the beginning of the current track ¹⁾	Press <u>/</u> once. (Press <u>/</u> once).
	Find the beginning of previous tracks ¹⁾	Press <u>/</u> repeatedly. (Press <u>/</u> repeatedly).
	Find the beginning of the next track ¹⁾	Press <u>/</u> once. (Press <u>/</u> once).
	Find the beginning of succeeding tracks ¹⁾	Press <u>/</u> repeatedly. (Press <u>/</u> repeatedly).
Go backwards quickly ^{1) 3)}	Go backwards quickly	Press and hold <u>/</u>. (Press and hold <u>/</u>).
Go forward quickly ^{1) 3)}	Go forward quickly	Press and hold <u>/</u>. (Press and hold <u>/</u>).
Jump to succeeding groups ²⁾	Jump to succeeding groups ²⁾	Press <u>/</u> (group) + repeatedly. (Press <u>/</u> (group) + repeatedly).
Jump to previous groups ²⁾	Jump to previous groups ²⁾	Press <u>/</u> (group) – repeatedly. (Press <u>/</u> (group) – repeatedly).

1) You can operate during both play and pause.

2) You can operate during play of a CD other than audio CDs.

3) You cannot operate when using an MP3 file recorded on a CD-R/CD-RW in a packet write format.

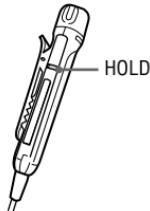
Continued 

Locking the controls (HOLD)

You can prevent accidental button presses while carrying the player by locking the controls. The OPERATION lamp flashes if you press any button when the HOLD function on the player is activated.

1 Slide the HOLD switch on the remote or on the player (on the back) in the direction of the arrow.

You can use the HOLD function for the remote and the player separately. For example, even if the HOLD function on the player is activated, you can operate the player by using the remote unless you set HOLD on the remote to on, too.

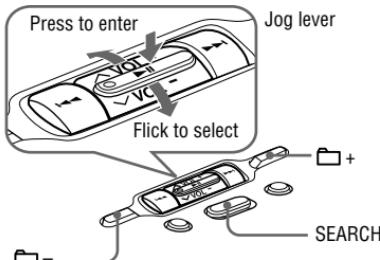


To unlock the controls

Slide the HOLD switch in the direction opposite to that of arrow.

Searching for Your Favorite Track/File

On the CD such as an ATRAC CD or an MP3 CD on which a number of files are recorded, you can search for your favorite track/file by viewing groups (File View) or by viewing a list of groups/files (List View). In either case, press the SEARCH button repeatedly.

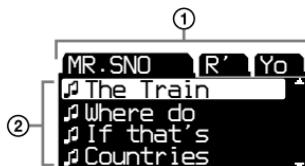


Searching by viewing groups (File View)

You can search for a file by checking the name of group (except on an audio CD) or files around the file being played.

1 Press SEARCH repeatedly.

The names of groups and files around the current file appear on the display.



- ① Group names
- ② File names

2 Press □+ or □- to select a group.

3 Flick the jog lever toward ▲/▼ to select a file.

4 Press ▶II on the jog lever.

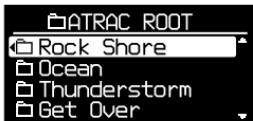
The file you selected starts playing.

To cancel searching

Press ■/CHARGE on the CD player.

Searching by viewing a list of groups/files (List View)

You can search for a track/file by checking the format type of the music source and the names of groups and files.

1 Press SEARCH repeatedly.

If you play a CD on which mixed audio data has been recorded:

The screen for selecting the format type such as "ATRAC" and "MP3" appears first.

Press ▶II on the jog lever.

2 Flick the jog lever toward ▲/▼ to select a group and press ▶II.**3 Flick the jog lever toward ▲/▼ to select a file.****4 Press ▶II on the jog lever.**

The track/file you selected starts playing.

To return to the previous screen

Press ▶◀ or ▶▶ on the CD player.

To cancel searching

Press ■/CHARGE on the CD player.

Checking CD information on the display

You can check CD information on the display of the player.

Depending on the region in which you purchased your CD player, the default language may not be "ENGLISH". Change the LANGUAGE setting, if necessary (☞ page 26).

When you are playing an MP3 CD containing files with an ID3 tag, ID3 tag information is displayed. (When there is no ID3 tag information, file name or group name is displayed). (☞ page 5)

Notes

- The characters A-Z, a-z, 0-9, and _ can be displayed on this player.
- Before playing a file, the player reads all file and group (or folder) information on the CD. "Reading" is displayed. Depending on the content of the CD, it may take some time to accomplish this reading.
- If the file does not belong to any group, "MP3 ROOT" appears on the display.

Continued ━━━━

To check information on the CD player display

Press DSPL/MENU on the player repeatedly.

Audio CD

- Track number, elapsed playing time
(Album name, artist name, track name)¹⁾



↓
Total number of tracks on the CD, total playing time of the CD, number of tracks left²⁾, time remaining on the CD²⁾



↓
File view screen



ATRAC CD/MP3 CD

- Group name³⁾, artist name³⁾, file name, file number, elapsed playing time



↓
CODEC information⁴⁾, total number of files, total number of groups, file number, remaining time of the current file



↓
File view screen



- 1) When you are playing an audio CD containing text information such as CD-TEXT, information in parentheses is displayed.
- 2) The displays appear only during normal play.
- 3) During play, “artist name” is not displayed if the disc does not have ID3 tag information. When the list of group names/file names appears on the display, “artist name” and “group name” are not displayed.
- 4) Bit rate and sampling frequencies are displayed. While an MP3 file made at VBR (variable bit rate) is being played, “VBR” appears on the display instead of a bit rate. In some cases, “VBR” appears halfway through playback, rather than from the beginning.

Changing Playback Options (PLAY MODE)

You can use various playback options such as selecting songs you want to listen to, and playing songs in your favorite order. For details about playback options, see [page 20](#).

You can also play songs repeatedly using the playback options you choose (repeat play, [page 22](#)).

- 1 Press **DSPL/MENU** on the player until the menu screen appears.



Ⓐ : PLAY MODE

♪ : SOUND

≡ : OPTION

- 2 Turn the jog lever toward **▲/▼** to select 'Ⓐ PLAY MODE' and press **▶▷**.

- 3 Turn the jog lever toward **▲/▼** to select the playback option.

The default setting is "ALL" (normal play).



- 4 Press **▶▷** on the jog lever.

- 5 When "REPEAT" appears, select "ON" or "OFF" and press **▶▷** on the jog lever.



To return to normal play

On the CD player, select "ALL" in the PLAY MODE menu.

Continued 

Playback options (PLAY MODE)



Display on the CD player	Explanation
ALL (Normal play)	All tracks on the CD are played in a track number order. For the ATRAC CD/MP3 CD, a playing order is different according to the setting of the "PLAY ORDER" in the OPTION menu.
GROUP (Group play)	All tracks in the selected group or all groups are played (ATRAC CD/MP3 CD only) (☞ page 21).
1 (Single play)	The current track is played once.
SHUFFLE (Shuffle play)	All tracks on the CD are played once in random order.
GROUP SHUFFLE (Group shuffle play)	All tracks in the selected group are played once in random order (ATRAC CD/MP3 CD only) (☞ page 21).
BOOKMARK (Bookmark play)	Tracks to which Bookmarks have been added are played. The play of tracks with Bookmarks starts in track number order, not in the order you added the Bookmarks (☞ page 21).
PLAYLIST (m3u play list play)	Tracks in the selected m3u play list* are played (MP3 CD only) (☞ page 21).
AUTO RANKING (Auto ranking play)	The tracks you have played most frequently from the CD are played from the 10th to the first.
RANKING SHUF (Auto ranking shuffle play)	Up to 32 tracks, which the player has automatically memorized as the most frequently played ones, are played in random order.
PROGRAM (PGM play)	Up to 64 tracks are played in your favorite order (☞ page 21).
INTRO (Intro play)	About the first 10 seconds of all tracks which follow the current track are played once.

* An m3u play list is a file in which an MP3 file playing order has been encoded. To use the play list function, record MP3 files on a CD-R/CD-RW using encoding software that supports the m3u format. You can play the top 8 lists (listed by file name) on your screen on the CD player.

Playing groups

- 1 Perform steps 1 and 2 of "Changing Playback Options (PLAY MODE)" (☞ page 19). In step 3, select "GROUP" or "GROUP SHUFFLE" and press ►II on the jog lever.
- 2 Flick the jog lever toward ▲/▼ to select a group.
- 3 Press ►II on the jog lever for 2 seconds or more.
- 4 When "REPEAT" appears, select "ON" or "OFF" and press ►II on the jog lever.

Note

If the group has no tracks, "Invalid" appears on the display.

Playing your favorite tracks (Bookmark play)

- 1 During play of the track to which you want to add a Bookmark, press ►II on the jog lever until  flashes slowly.
- 2 If you want to add a Bookmark to two or more tracks, repeat step 1.
You can add Bookmarks to up to 10 CDs for audio CDs (up to 99 tracks for each CD) and up to 5 CDs for ATRAC CDs/MP3 CDs (up to 999 tracks for each CD).
- 3 Press DSPL/MENU until the menu screen appears.
- 4 Flick the jog lever toward ▲/▼ to select "PLAY MODE", and press ►II.

- 5 Flick the jog lever toward ▲/▼ to select "BOOKMARK", and then press ►II.

To remove Bookmarks

During play of a track with a Bookmark, press and hold ►II on the player until  disappears.

Notes

- If you try to add Bookmarks to tracks on an 11th CD (on a 6th CD when playing ATRAC CDs/MP3 CDs), the Bookmarks of the CD you played first will be erased.
- All Bookmarks stored in memory will be erased if you remove all power sources, or if you continue playing the player on the rechargeable battery while "Low Battery" is displayed, without charging the battery.

Playback

Playing your favorite play lists (m3u play list play)

- 1 In the step 3 of "Changing Playback Options (PLAY MODE)" (☞ page 19), select "PLAYLIST".
- 2 Flick the jog lever toward ▲/▼ to select a play list.
- 3 Press ►II on the jog lever.

Playing tracks in your favorite order (PGM play)

- 1 While the player stopped, select "PROGRAM" in step 3 of the player operation for "Changing Playback Options (PLAY MODE)" (☞ page 19), and then press ►II on the jog lever.

Continued 

2 Turn the jog lever toward \wedge/\vee to select your tracks, and then press and hold $\blacktriangleright\text{II}$ until the display changes.

When playing an ATRAC CD/MP3 CD: You can also select a track in another group by pressing $\square+$ or $\square-$.

3 Repeat step 2 to select tracks in your favorite order.

You can select up to 64 tracks.

When you finish entering the 64th track, the track number selected first (audio CD)/file name (ATRAC CD/MP3 CD) appears on the display.

If you select 65 tracks or more, the tracks selected first are erased one by one.

4 Press $\blacktriangleright\text{II}$ on the jog lever.

Playback starts in the selected order.

To check the program

- 1 While the player stopped, select “PROGRAM” in step 3 of the player operation for “Changing Playback Options (PLAY MODE)” (page 19), and then press and hold $\blacktriangleright\text{II}$ on the jog lever until the display changes.
- 2 On the player, whenever you press and hold $\blacktriangleright\text{II}$, the tracks are displayed in playing order.

To cancel the PGM play

Press $\blacksquare/\text{CHARGE}$ on the CD player.

Playing tracks repeatedly (Repeat play)

Select “ON” in step 5 of the player operation for “Changing Playback Options (PLAY MODE)” (page 19).

The playback option you have selected repeats.

To return to normal play

On the CD player, select “OFF”.

Changing Sound Quality

For details about the setting of SOUND items, see \mathbb{G} page 24.

Selecting the sound quality

You can set up the “EQUALIZER” setting and/or “CLEARBASS” setting. If you set both at the same time, you can enjoy more bass sound along with the sound quality you want.

-
- 1 Press DSPL/MENU on the player until the menu screen appears.

- 2 Turn the jog lever toward \wedge/\vee to select “ \blacktriangleright SOUND” and press $\blacktriangleright\text{II}$.



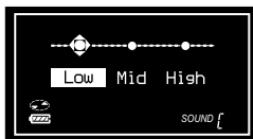
- 3 Flick the jog lever toward \wedge/\vee to select the item you want to set up and press $\blacktriangleright\text{II}$.

- 4 Flick the jog lever toward \wedge/\vee to select an option and press $\blacktriangleright\text{II}$.

Customizing sound quality

You can adjust sound quality for each frequency range individually, checking the shape of the wave on the display.

- 1 Select “EQUALIZER” in step 3 and “CUSTOM” in step 4 of the player operation for “Selecting the sound quality” (☞ page 22).
- 2 Press **◀◀** or **▶▶** for 2 seconds or more to select the frequency range.

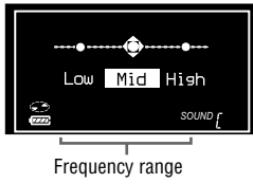


“Low” is displayed first.

There are 3 frequency ranges; “Low” (low range audio), “Mid” (middle range audio), and “High” (high range audio).

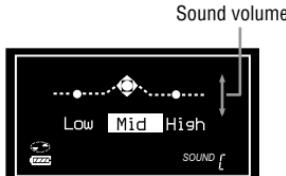
- 3 Press **◀◀** or **▶▶** repeatedly to select the shape of the wave.

There are 3 shapes stored in memory for each frequency range.



- 4 Flick the jog lever toward **^/V** to select the sound volume.

The sound volume can be adjusted in 7 levels.



- 5 Repeat steps 2 to 4 to make adjustments for the remaining 2 frequency ranges, and then press **▶II** on the jog lever.

To return to the previous screen

On the CD player, press **■/CHARGE**.

To cancel the adjustment operation

On the CD player, press **■/CHARGE** for 2 seconds or more.

Notes

- If the sound is distorted by your sound settings when you turn up the volume, turn the volume down.
- If you feel a difference in sound volume between the “CUSTOM” sound setting and other sound settings, adjust the volume to your preference.

Continued ➞

SOUND items

To return to the previous screen, press ■/CHARGE on the CD player. To cancel the setting operation, press ■/CHARGE on the CD player for 2 seconds or more.

Item	Options (●: Default setting)	
EQUALIZER (Equalizer setting)	● OFF	Normal sound quality
	SOFT	For vocal, stressing middle range audio
	ACTIVE	Lively sounds, emphasizing high and low range audio
	HEAVY	Powerful sounds, further emphasizing high and low ranges compared with ACTIVE sound
	CUSTOM	Customized sound (see  page 23 for details)
CLEARBASS (Bass sound setting)	● OFF	Normal sound quality.
	1	Emphasizing bass sound.
	2	Emphasizing bass sound more than 1.
	3	Emphasizing bass sound more than 2.

Note

If you change the setting of the EQUALIZER items after you have set the CLEARBASS items, the setting of the EQUALIZER items get priority.

When you set both EQUALIZER items and CLEARBASS items, set the EQUALIZER items first.

Changing Optional Settings

For details about the setting of OPTION items, see  page 26.

Setting various functions

You can set the various functions such as the language for the menu and the playback order of the groups/files.

- 1 Press DSPL/MENU on the player until the menu screen appears.
- 2 Turn the jog lever toward \wedge/\vee to select “ OPTION” and press $\blacktriangleright\text{II}$.



- 3 Flick the jog lever toward \wedge/\vee to select the item you want to set up and press $\blacktriangleright\text{II}$.
- 4 Flick the jog lever toward \wedge/\vee to select an option and press $\blacktriangleright\text{II}$.

When you are setting the “LANGUAGE” or “PLAY ORDER”, repeat step 4.

Continued 

OPTION items

To return to the previous screen, press ■/CHARGE on the CD player. To cancel the setting operation, press ■/CHARGE on the CD player for 2 seconds or more.

Items	Options (●: Default settings)	
LANGUAGE (Language for menu, etc.)	MENU	<input checked="" type="radio"/> ENGLISH Select the language for menu text, warning message, etc. <input type="radio"/> FRENCH <input type="radio"/> GERMAN <input type="radio"/> ITALIAN <input type="radio"/> PORTUGUESE <input type="radio"/> RUSSIAN <input type="radio"/> SPANISH
	TEXT ¹⁾	<input checked="" type="radio"/> AUTO Select the language for CD-TEXT, ID3 tag, etc. <input type="radio"/> ENGLISH If you select "AUTO", you can read the text in the following language. <input type="radio"/> FRENCH <input type="radio"/> GERMAN <input type="radio"/> ITALIAN <input type="radio"/> PORTUGUESE <input type="radio"/> RUSSIAN <input type="radio"/> SPANISH
	● 1	Protection against sound skipping is provided with high quality CD sound.
	2	Enhanced protection against sound skipping is provided.
	● OFF	The volume changes without limiting the volume level.
	ON	The maximum volume is limited to protect your hearing.
	● OFF	The timer does not work.
TIMER (Off timer)	ON	1-99 min (●) is displayed on the player. You can check the remaining playback time by selecting this option during play. Turn the VOL +/- control on the remote repeatedly to increase or decrease the length of time by 5 minutes, or keep turning the VOL +/- control to increase or decrease by 1 minute. The default setting is "10 min".
	● HEADPHONE	Select this when you connect the supplied headphones or earphones/headphones.
AUDIO OUT ¹⁾ (External audio output)	LINE OUT	Select this when you connect other devices such as active speakers with an audio cord (☞ page 28).
	● ON	The beep sounds when you operate the player.
	OFF	The beep is turned off.
BEEP (Sound of operation)	● OFF	The CD is played as recorded on the disc, including spaces between tracks.
	ON	The CD is played without space between tracks.
SEAMLESS ¹⁾³⁾ (Playing tracks continuously)		

Items	Options (●: Default settings)		
POWER SAVE (The OPERATION lamp on the player) ¹⁾	● OFF	On the CD player, the display lights up for about 10 seconds, then turns off. The OPERATION lamp on the player remains lit.	
	1	On the CD player, the display does not light up.	
	2	On the CD player, the display does not light up. Furthermore, the SOUND settings are not effective.	
PLAY ORDER (Playback order) ¹⁾	TRACK	● NORMAL	Play back the music source in the order of recording.
		ID3tagTNO	Play back in the order of ID3 tag number.
		FILE NAME	Play back in the alphabetical order of the file names.
	GROUP	● OFF	Play back the music source in the order of recording.
		ON	Play back the music source in the order of group names.
CD-EXTRA ^{1) 4)} (Playback by disc format)	● OFF	Set to "OFF" as long as you can play your CD normally.	
	ON	If you cannot play your CD-Extra, set to "ON." You may play it.	

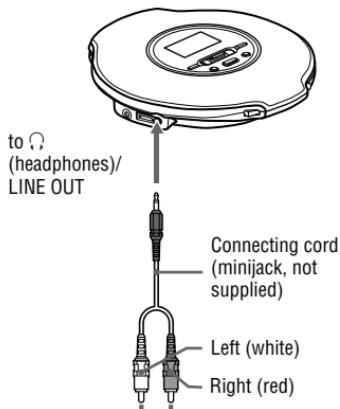
- 1) You can set this up only while the player is stopped.
- 2) AVLS is an abbreviation of the Automatic Volume Limiter System.
- 3) This function works only for ATRAC CDs.
- 4) This function works only for audio CDs and CD-Extra CDs.

Notes

- Even if "G-PROTECTION" is set to "2", sound may skip:
 - when the CD player receives stronger continuous shock than expected,
 - when a dirty or scratched CD is played, or
 - for CD-Rs/CD-RWs, when a poor-quality disc is played or there is a problem with the original recording device or application software.
- Even if "SEAMLESS" is set to "ON", the tracks may not play continuously depending on how the source music was recorded.

Connecting Other Devices

You can listen to CDs through a stereo system and record CDs on a MiniDisc or a cassette tape. See the instruction manual that comes with the device you want to connect. Be sure to turn off all devices before making the connections and changing the settings explained below.



Stereo system cassette recorder, radio cassette recorder, etc.

“LINE OUT” or “HEADPHONE” blinks for about 5 seconds on the display of the player when a connecting cord is connected.

You need to change the setting for “AUDIO OUT” in the OPTION menu so that sound is output to the connected device. The settings of “AUDIO OUT” are shown below. To make those settings, see  page 25-26.

Connected device	Setting
Headphones	HEADPHONE
Device connected using the connected cord	LINE OUT

When you connect another device, set this to “LINE OUT”. When the setting is “LINE OUT”, volume cannot be adjusted using either the player or the remote, and the sound function does not work.

Notes

- Before you play a CD, turn down the volume of the connected device to avoid damaging the connected speaker.
- Use the AC power adaptor for recording. If you use the rechargeable battery or a dry battery as a power source, the battery may become completely depleted in the middle of recording.
- To record high quality CD sound, set “G-PROTECTION” to “1” in the OPTION menu.

Troubleshooting

Should any problem persist after you have checked these symptoms, consult your nearest Sony dealer.

Power

Symptom	Cause and/or corrective action
The rechargeable battery cannot be charged.	<ul style="list-style-type: none"> → The rechargeable battery is not inserted in the battery compartment. Insert the rechargeable battery (☞ page 11). → The CD is playing. Turn it off (☞ page 14). → While the CD player is stopped, press ■/CHARGE. → You pressed ■ on the remote. Press ■/CHARGE on the CD player.

Sound

Symptom	Cause and/or corrective action
The volume does not increase even if you turn the VOL +/- control on the remote in the + direction repeatedly (even if you flick the jog lever toward VOL + repeatedly on the player).	<ul style="list-style-type: none"> → “AVLS” is set to “ON”. Set it to “OFF” (☞ page 26). → “AUDIO OUT” is set to “LINE OUT”. Set it to “HEADPHONE” (☞ page 26).
No sound, or noise is heard.	<ul style="list-style-type: none"> → Connect the earphones/headphones plugs firmly. → The plugs are dirty. Clean the earphones/headphones plugs with a dry soft cloth periodically.
The volume cannot be adjusted.	<ul style="list-style-type: none"> → “AUDIO OUT” is set to “LINE OUT”. Adjust the volume using the volume control on the connected device, or set “AUDIO OUT” to “HEADPHONE” (☞ page 26).
A rustling noise is heard from the CD.	<ul style="list-style-type: none"> → Close the lid of the battery compartment firmly (☞ page 11).
When using the player with a stereo system connected, the sound is distorted or noisy.	<ul style="list-style-type: none"> → “AUDIO OUT” is set to “LINE OUT”. Adjust the volume of the connected device (☞ page 26). → “AUDIO OUT” is set to “HEADPHONE”. Adjust the volume on the player (☞ page 26).
EQUALIZER items cannot be set up.	<ul style="list-style-type: none"> → “POWER SAVE” is set to “2” (☞ page 27).

Continued ➞

Operation/Playback

Symptom	Cause and/or corrective action
The playing time is too short. The CD does not play.	<ul style="list-style-type: none">→ Check that you are using an alkaline battery and not a manganese battery.→ Replace the dry battery with a new LR6 (size AA) alkaline battery (☞ page 11).→ Charge and discharge the rechargeable battery several times (☞ page 11).
Certain tracks cannot be played.	<ul style="list-style-type: none">→ You tried to play files saved in a format that is not compatible with this player (☞ page 5).→ Change the setting of “CD-EXTRA” in the OPTION menu. You may play your CD (☞ page 27).
“Low Battery” appears in the display, and the CD does not play.	<ul style="list-style-type: none">→ The rechargeable battery is used up completely. Charge the battery (☞ page 11).→ Replace the dry battery with a new LR6 (size AA) alkaline battery (☞ page 11).
“Hi DC in” appears in the display.	<ul style="list-style-type: none">→ An AC power adaptor which is rated higher than the one supplied or recommended is being used. Use only the supplied AC power adaptor or the car battery cord recommended in “Optional Accessories” (☞ page 33).
The CD does not play, or “No Disc” appears on the display when a CD is placed in the player.	<ul style="list-style-type: none">→ The CD is dirty or defective. Clean it or change it.→ Check that the CD is inserted with the label side up (☞ page 14).→ Moisture condensation has occurred. Leave the CD player aside for several hours until the moisture evaporates.→ Close the lid of the battery compartment firmly (☞ page 11).→ Make sure the battery is inserted correctly (☞ page 11).→ Connect the AC power adaptor to an AC outlet securely (☞ page 13).→ Press ►II on the remote (on the player, press ►II of the jog lever) after one second or more has passed since the AC power adaptor was connected.→ The CD-R/CD-RW in the player is blank.→ There is a problem with the quality of the CD-R/CD-RW, recording device, or application software.
The OPERATION lamp flashes on the player when you press a button, and the CD does not play.	<ul style="list-style-type: none">→ The buttons are locked. Slide the HOLD switch back (☞ page 16).

Symptom	Cause and/or corrective action
Playback starts from the point you stopped (resume function).	→ The resume function is working. To start play from the first track, press and hold ▶II on the remote while the player is stopped (on the player, press and hold ▶II on the jog lever) until the first track starts playing, or open the lid of the player (☞ page 15). Or, remove all power sources, and then insert the battery or connect the AC power adaptor again.
During playback of an ATRAC CD or MP3 CD, the CD does not rotate but you can hear the sound normally.	→ This player is designed to stop the rotation of an ATRAC CD or MP3 CD during playback to reduce the power consumption. The player is not malfunctioning.
"No File" appears in the display after you press ▶II on the remote (on the player, after you press ▶II on the jog lever) or when the lid of the player is closed.	→ There are no ATRAC3plus/MP3 files on the CD-R/CD-RW. → A CD-R/CD-RW from which the data has been erased is being used. → The CD is dirty.
The LCD display becomes hard to see or slows down.	→ You are using your CD player at high temperatures (above 40°C/104°F) or at low temperatures (below 0°C/32°F). At room temperature, the display will return to its normal operating condition.
bookmark is flashing quickly on the display, and you cannot locate the beginning of the track or a specific point in the track.	→ The CD player has entered the preparation stage of Bookmark play. Change the PLAY MODE setting to "ALL" (☞ page 20).
Even though you have not selected "BOOKMARK," bookmark (Bookmark) flashes.	→ If you have selected the playback option other than "BOOKMARK," bookmark (Bookmark) flashes.
Play stopped abruptly.	→ The off timer has been set. Change the setting of "TIMER" to "OFF" (☞ page 26). → The rechargeable battery or the dry battery is used up completely. Charge the rechargeable battery (☞ page 11), or replace the dry battery with a new LR6 (size AA) alkaline battery (☞ page 11).
You cannot operate the player, and a sequence of 8 numbers or letters appear on the display of the CD player.	→ This phenomenon may occur, depending on the CD you are using. Remove all power sources, and then insert the battery or reconnect the AC power adaptor. Try to operate the player again. If the problem persists, consult your nearest Sony dealer.

Others

Symptom	Cause and/or corrective action
When closing the lid of the CD player, the CD starts to rotate.	→ The player is reading the information on the CD, not malfunctioning.
You cannot operate the CD player properly using the remote.	→ The buttons on the player are kept pressed by mistake. → The remote is not connected securely.

Maintenance

To clean the casing

Use a soft cloth slightly moistened in water or a mild detergent solution. Do not use alcohol, benzine or thinner.

Specifications

System

Compact disc digital audio system

Laser diode properties

Material: GaAlAs

Wavelength: $\lambda = 770 - 800$ nm

Emission duration: Continuous

Laser output: Less than 44.6 μ W

(This output is the value measured at a distance of 200 mm from the objective lens surface on the optical pick-up block with 7 mm aperture).

D-A conversion

1-bit quartz time-axis control

Frequency response

20 - 20 000 Hz ± 1 dB (measured by JEITA)

Output (at 3 V input level)

Line output (stereo minijack)

Output level 0.7 V rms at 47 k Ω

Recommended load impedance over 10 k Ω

Headphones (stereo minijack)

Approx. 5 mW + Approx. 5 mW at 16 Ω

(Approx. 1.5 mW + Approx. 1.5 mW at 16 Ω)*

*For the customers in Europe

Power requirements

- Sony NH-7WMAA rechargeable battery:
1.2 V DC \times 1
- LR6 (size AA) battery: 1.5 V DC \times 1
- AC power adaptor (DC IN 3V jack):
220 V, 50 Hz (Model for China)
120 V, 60 Hz (Model for Mexico)

Operating temperature

5°C - 35°C (41°F - 95°F)

Dimensions (w/h/d) (excluding projecting parts and controls)

Approx. 129 \times 29.6 \times 140.8 mm
(5 1/8 \times 1 3/16 \times 5 5/8 in.)

Mass (excluding accessories)

Approx. 170 g (6.0 oz.)

US and foreign patents licensed from Dolby Laboratories.

Design and specifications are subject to change without notice.

Optional Accessories

AC power adaptor	AC-E30HG*
Active speaker system	SRS-Z1 SRS-Z30
Car battery cord	DCC-E345
Car battery cord with car connecting pack	DCC-E34CP
Car connecting pack	CPA-9C
Connecting cord	RK-G129 RK-G136
Earphones (except for the customers in France)	MDR-EX71SL MDR-J20SP
Earphones (for the customers in France)	MDR-E808SP

* Specifications for AC power adaptors vary for each area. Check your local voltage and the shape of the plug before purchasing.

Your dealer may not handle some of the accessories listed above. Please ask the dealer for detailed information about the accessories in your country/region.

Index

Symbols

-  (Battery) 11, 12
-  (BOOKMARK) 20, 21
-  (disc) 14
- 1 20
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